

UNIVERSITY OF LOUISIANA AT LAFAYETTE

PHYSICS 215

**Catalog Data:** Introduction to Physics Laboratory I. (0,3,1). Experiments illustrating principles in mechanics, waves, and thermodynamics. Prereq: Phys 207 or 201.

**Textbook:** Physics 215 Laboratory manual, written by W. Andrew Hollerman

**Coordinator:** Natalia Sidorovskaia, Chair of the Physics Department

**Topics:** [one (1) to two (2) lab periods are assigned to perform the experiments listed below]

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|-----|------------------|------------------------------|
| 1.  | Experiment I:    | Data Analysis                |
| 2.  | Experiment II:   | Acceleration Due to Gravity  |
| 3.  | Experiment III:  | Newton's Second              |
| 4.  | Experiment IV:   | Conservation of Energy       |
| 5.  | Experiment V:    | One-dimensional Collisions   |
| 6.  | Experiment VI:   | Angular Motion               |
| 7.  | Experiment VII:  | Simple Harmonic Motion       |
| 8.  | Experiment VIII: | Standing Waves               |
| 9.  | Experiment IX:   | The Specific Heat of a Metal |
| 10. | Experiment X:    | Gas Laws                     |

**Grades:** Grades will be assigned based on the students' performance on laboratory work, laboratory reports and examinations. A schedule of these will be provided separately.